NRC FORM 592M
(10-2020)

U.S. NUCLEAR REGULATORY COMMISSION

Materials Inspection Record

1. Licensee Name:	2. Docket Number(s):	3. License Number(s)
Mercy Health Muskegon	030-02016	21-02187-01

4. Report Number(s):	5. Date(s) of Inspection:
2022-001	January 4, 2022

6. Inspector(s):	7. Program Code(s):	8. Priority:	9. Inspection Guidance Used:
Ryan Craffey	02230	2	IP 87131, IP 87132

10. Licensee Contact Name(s):	11. Licensee E-mail Address:	12. Licensee Telephone Number(s):
Dale Schippers, Proposed RSO Reese Haywood, AMP, RSO	dale.schippers@mercyhealth.com haywoojr@mercyhealth.com	231-672-3339 231-672-2019

13. Inspection Type:	14. Locations Inspected:	15. Next Inspection Date (MM/DD/YYYY):
☐ Initial ☑ Routine ☑ Announced ☐ Non-Routine ☐ Unannounced	☑ Main Office ☑ Field Office ☐ Temporary Job Site ☐ Remote	01/04/2024 ☑ Normal ☐ Extended ☐ Reduced ☐ No change

16. Scope and Observations:

This was an announced routine inspection of a 330-bed community hospital authorized to use byproduct material for diagnostic and therapeutic medical purposes at two locations on its campus in Muskegon, Michigan, and at two satellite facilities - one in Muskegon and one in Ludington. At the main campus on Sherman Boulevard, the licensee performed diagnostic administrations daily at the main hospital, occasional therapeutic administrations of I-131 NaI capsules, and infrequent permanent implant brachytherapy treatments using I-123 seeds. The licensee used an HDR unit containing Ir-192 at its cancer center for occasional gynecological cancer treatments. At each satellite facility, the licensee performed diagnostic administrations (cardiac stress tests only). The licensee maintained an RSC which met quarterly, and retained the services of a medical physics consultant. However, with the recent hiring of a full-time RSO candidate, the licensee intended to end its retainer of a medical physics consultant in early 2022.

The inspector visited the main hospital and cancer center at the licensee's campus in Muskegon. All areas were properly posted and all licensed material was adequately secured. Readings from independent surveys in restricted and unrestricted areas of these facilities were within regulatory limits, and no contamination was noted besides a small amount on an absorbent pad in the injection area which the licensee immediately addressed. The inspector observed several diagnostic administrations of Tc-99m at the main hospital, the receipt of several packages containing licensed material, and demonstrations of HDR daily spot checks and implementation of emergency response procedures at the cancer center. The inspector interviewed several nuclear medicine technologists, medical physicists, and members of licensee management. All were knowledgeable of radiation protection principles, licensee procedures, and regulatory requirements, and utilized appropriate ALARA practices, personnel dosimetry, and calibrated radiation detection instrumentation throughout.

The inspector also reviewed a selection of records including quarterly consultant audits, personnel dosimetry reports, routine nuclear medicine records, HDR source exchange, full calibration, and annual training documentation, as well as a selection of written directives, planning and verification documentation and release calculations (when necessary) for I-131 NaI therapies, HDR treatments, and the sole permanent implant brachytherapy treatment performed since the last inspection.

No violations of NRC requirements were identified as a result of this inspection.